

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-8. (Cancelled)

9. (New) A drawing method comprising:

inputting arbitrary view point coordinates in a three-dimensional coordinate system;

drawing a first image of an object generated based on road network data that uses a two-dimensional coordinate system, the first image illustrating the object viewed from the view point coordinates;

modifying depth information of the first image to information on distance from a position closer to the view point coordinates than a position of the object; and

drawing, based on modified depth information, a second image of a ground object so as to overlap with the first image, the second image illustrating the ground object viewed from the view point coordinates, the ground object expressed using the three-dimensional coordinate system.

10. (New) The drawing method according to claim 9, further comprising drawing a third image of a transparent object that is present at a position closer to the view point coordinates than the position of the object, wherein

the modifying includes modifying the depth information to depth information of the third image.

11. (New) The drawing method according to claim 10, wherein the drawing the second image includes drawing the second image such that a portion of the second image that overlaps with the third image is not drawn, if the ground object is positioned behind the transparent object with respect to the view point coordinates.

12. (New) The drawing method according to claim 9, wherein the object is an object having a cylindrical shape of which a fore-end opening at a fore end of the cylindrical shape and an inner peripheral wall surface are viewed when the object is viewed from the view point coordinates, the fore end being one of ends of the cylindrical shape positioned closer to the view point coordinates.

13. (New) The drawing method according to claim 12, further comprising drawing a fourth image of another object positioned behind the object and the ground object with respect to the view point coordinates, wherein

the object has a rear-end opening at another one of the ends of the cylindrical shape, the rear-end opening viewed when the object is viewed from the view point coordinates, and

the drawing the first image includes drawing the first image so as to overlap with the fourth image.

14. (New) The drawing method according to claim 12, further comprising detecting whether the view point coordinates correspond to a position inside the cylindrical shape of the object, wherein

the drawing the first image includes drawing the first image based on a result of detection at the detecting.

15. (New) A computer-readable recording medium that stores therein a computer program making a computer execute:

inputting arbitrary view point coordinates in a three-dimensional coordinate system;

drawing a first image of an object generated based on road network data that uses a two-dimensional coordinate system, the first image illustrating the object viewed from the view point coordinates;

modifying depth information of the first image to information on distance from a position closer to the view point coordinates than a position of the object; and

drawing, based on modified depth information, a second image of a ground object so as to overlap with the first image, the second image illustrating the ground object viewed from the view point coordinates, the ground object expressed using the three-dimensional coordinate system.

16. (New) The computer-readable recording medium according to claim 15, wherein

the computer program further makes the computer execute drawing a third image of a transparent object that is present at a position closer to the view point coordinates than the position of the object, and

the modifying includes modifying the depth information to depth information of the third image.

17. (New) The computer-readable recording medium according to claim 16, wherein the drawing the second image includes drawing the second image such that a portion of the

second image that overlaps with the third image is not drawn, if the ground object is positioned behind the transparent object with respect to the view point coordinates.

18. (New) The computer-readable recording medium according to claim 15, wherein the object is an object having a cylindrical shape of which a fore-end opening at a fore end of the cylindrical shape and an inner peripheral wall surface are viewed when the object is viewed from the view point coordinates, the fore end being one of ends of the cylindrical shape positioned closer to the view point coordinates.

19. (New) The computer-readable recording medium according to claim 18, wherein
the computer program further makes the computer execute drawing a fourth image of another object positioned behind the object and the ground object with respect to the view point coordinates,
the object has a rear-end opening at another one of the ends of the cylindrical shape, the rear-end opening viewed when the object is viewed from the view point coordinates, and
the drawing the first image includes drawing the first image so as to overlap with the fourth image.

20. (New) The computer-readable recording medium according to claim 18, wherein
the computer program further makes the computer execute detecting whether the view point coordinates correspond to a position inside the cylindrical shape of the object, and
the drawing the first image includes drawing the first image based on a result of detection at the detecting.

21. (New) A drawing apparatus comprising:

an input unit configured to input arbitrary view point coordinates in a three-dimensional coordinate system;

a first drawing unit configured to draw a first image of an object generated based on road network data that uses a two-dimensional coordinate system, the first image illustrating the object viewed from the view point coordinates;

a modifying unit configured to modify depth information of the first image to information on distance from a position closer to the view point coordinates than a position of the object; and

a second drawing unit configured to draw, based on modified depth information, a second image of a ground object so as to overlap with the first image, the second image illustrating the ground object viewed from the view point coordinates, the ground object expressed using the three-dimensional coordinate system.

22. (New) The drawing apparatus according to claim 21, further comprising a third drawing unit configured to draw a third image of a transparent object that is present at a position closer to the view point coordinates than the position of the object, wherein

the modifying unit is configured to modify the depth information to depth information of the third image.

23. (New) The drawing apparatus according to claim 22, wherein the second drawing unit is configured not to draw a portion of the second image that overlaps with the third image, if the ground object is positioned behind the transparent object with respect to the view point coordinates.

24. (New) The drawing apparatus according to claim 21, wherein the object is an object having a cylindrical shape of which a fore-end opening at a fore end of the cylindrical shape and an inner peripheral wall surface are viewed when the object is viewed from the view point coordinates, the fore end being one of ends of the cylindrical shape positioned closer to the view point coordinates.

25. (New) The drawing apparatus according to claim 24, further comprising a fourth drawing unit configured to draw a fourth image of another object positioned behind the object and the ground object with respect to the view point coordinates, wherein

the object has a rear-end opening at another one of the ends of the cylindrical shape, the rear-end opening viewed when the object is viewed from the view point coordinates, and

the first drawing unit is configured to draw the first image so as to overlap with the fourth image.

26. (New) The drawing apparatus according to claim 24 further comprising a detecting unit configured to detect whether the view point coordinates correspond to a position inside the cylindrical shape of the object, wherein

the first drawing unit is configured to draw the first image based on a result of detection by the detecting unit.